

January 6, 1965

LINEAR PHASOLVER MEASURING ENGINE



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The heart of the phasolver is the printed pattern consisting of metal deposited on glass plates. The driver has a sinusoidal pattern on it and the coupler which faces the driver and slides along it has transverse bars. The master photographic negative on a glass plate was made by [redacted] has not produced a wholly satisfactory unit although he has been trying since last spring. His two latest pieces, however, seem to be good enough to proceed.

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[redacted] is making the coupler and he is also using the [redacted] driver master to make a working driver. [redacted] has been trying since November to produce suitable parts and for one reason or another they have been unacceptable. Both [redacted] and [redacted] believe that [redacted] operation is straightforward and not difficult and neither one can see why it should take so long to get right.

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I think a visit by [redacted] is in order.

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The question is of course if it is so hard to make the parts, what future is there for the machine. They surely must have the same problem with their rotary phasolvers which are in current production.

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[redacted] said they went through the same sort of hair raising experience getting their rotary phasolver master. It was made by [redacted] will hardly speak to them any more. Once they had the master though, the production parts were easy to obtain. [redacted] makes their rotary phasolver production discs. [redacted] also has a proven capability and they are considering them as a second source. The experience with the rotary discs provides grounds for optimism for the success of the linear phasolver.

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Levi's latest delivery promise for a working master and working driver is to ship [redacted] So they may arrive Monday, Jan. 11, 1965.

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There were two intermediate steps used by [redacted] to make the driver photo-emulsion-on-glass master. One was a

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- 2 -

single cycle sine wave generated by a slit and the other was a step and repeat copy of the single cycle to make a full length original. [ ] is sending the intermediate plates to [ ] will have them measured to see if the second harmonic systematic errors are in the intermediate parts.

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